

VERMONT COMMISSION ON
WIND ENERGY
REGULATORY POLICY

FINDINGS AND
RECOMMENDATIONS

PREPARED PER EXECUTIVE ORDER 04-04
DECEMBER 15, 2004

Table of Contents

SUMMARY OF RECOMMENDATIONS.....	I
1. INTRODUCTION.....	1-1
1.1 COMMISSION PURPOSE.....	1-1
1.2 OVERVIEW OF CONTENTS.....	1-2
2. STATUS OF WIND PROJECTS AND RELATED REGULATIONS.....	2-3
2.1 WIND PROJECT STATUS.....	2-3
2.2 STATUS OF REGULATIONS	2-4
2.2.1 Section 248	2-5
2.2.2 Act 250	2-7
3. COMMISSION ACTIVITIES.....	3-10
3.1 TIMELINE.....	3-10
3.2 INFORMATION SESSIONS.....	3-10
3.3 WIND FARM TRIPS.....	3-10
3.4 SUPPLEMENTAL RESEARCH.....	3-11
3.5 PUBLIC MEETINGS AND FEEDBACK.....	3-11
3.6 DELIBERATIONS AND REPORTING	3-11
4. COMMISSION FINDINGS AND RECOMMENDATIONS.....	4-12
4.1 ASSUMPTIONS.....	4-12
4.1.1 Findings.....	4-12
4.1.2 Recommendations.....	4-13
4.2 IS SECTION 248 APPROPRIATE?.....	4-13
4.2.1 Findings.....	4-14
4.2.2 Recommendations.....	4-15
4.3 IS THE SECTION 248 PROCESS APPROPRIATE?.....	4-16
4.3.1 Findings.....	4-16
4.3.2 Recommendations.....	4-18
4.4 ARE THE EVALUATION CRITERIA AND METHODS APPROPRIATE?.....	4-19
4.4.1 Findings.....	4-19
4.4.2 Recommendations.....	4-20
4.5 IS THE ADMINISTRATIVE SUPPORT APPROPRIATE?.....	4-20
4.5.1 Findings.....	4-21
4.5.2 Recommendations.....	4-21
5. OTHER ITEMS TO CONSIDER.....	5-22

Summary of Recommendations

Governor Douglas created the Commission on Wind Energy Regulatory Policy (Commission) by Executive Order on July 12, 2004. The Commission was tasked with providing guidance and recommendations on whether 30 V.S.A. Section 248 provides a review process appropriate to commercial wind generation projects and, if not, to recommend regulatory or other appropriate changes to the regulatory process. The following is a summary of the Commission's recommendations:

- The recommendations apply only to proposed wind generation projects and not to other types of electricity generation and infrastructure, as that is outside the scope of the Commission's directive.
- The recommendations apply to proposed commercial wind generation projects [larger than net metered projects which are generally 150 kW or less] in Vermont that will sell and deliver power through the grid. Net-metered systems are treated separately by the Public Service Board (PSB).
- The recommendations should be implemented through rulemaking where possible, but the Commission defers to the PSB to determine how recommendations are best implemented.
- Section 248 is the appropriate vehicle for siting commercial wind generation projects. However, the Commission recommends several modifications to Section 248 for wind projects due to their unique characteristics (tower size, visibility from considerable distances, potential placement on ridgelines, etc.) and in response to concerns expressed in the public hearing process.
- To address the issue of overlapping jurisdiction, the Commission recommends the following statutory change to Section 248 (which was gleaned from suggestions by Pat Moulton Powden, Chair of the Environmental Board (EB) that were based on previous work developed by EB and PSB staff (but not Environmental Board Members):

(1) When site preparation for, or construction of, a facility for wind generation proposed under this section will occur on lands subject to the continuing jurisdiction of 10 V.S.A. Chapter 151 (Act 250), the public service board shall give due consideration to any findings of fact and conclusions of law contained in any prior decision issued by a district environmental commission, the environmental board or the environmental court. If a successful review of such site preparation for, or construction of, a facility for wind generation requires the amendment, repeal or modification of any condition contained in a land use permit issued by a district environmental commission, the environmental board or the environmental court, the public service board shall give due consideration to the relevant criteria of Act 250 and applicable case precedent and take whatever action is reasonably necessary, consistent with the general good of the state, to prevent undue adverse impacts from occurring as identified in the prior findings and

conclusions of the district environmental commission, environmental board or the environmental court. Any public service board decision under this section shall supersede any prior decision of the district environmental commission, the environmental board or the environmental court but only to the extent that the proposed facility for wind generation subject to proceedings under this section has an impact on prior findings and conclusions described herein.

- The PSB should host a minimum of two public meetings in the project site region, one of which will be an information session before proceedings begin to inform concerned parties about the Section 248 process, how it relates to the proposed wind project, as well as general information on the proposed wind project. The second meeting should convene later in the process, perhaps after the technical hearings, to receive additional public input on the project after more is known about the project and before a decision is made.
- The PSB should increase applicant's public notification requirements for proposed wind generation by requiring: 1) advertising advance notice in all towns that are wholly or partially within a radius of a minimum of 10 miles of each proposed turbine; 2) initial and ongoing mailings (e.g., of key events) to all municipal and regional planning commissions, and the town clerk in each town wholly or partially within a 10 mile radius of each proposed turbine; and 3) ongoing mailings to all stakeholders that sign-up to be on a mailing list (the list should be advertised and maintained by the applicant).
- The PSB should increase the advance notice period of filing "plans for construction" to municipal and regional planning commissions from 45 days to a minimum of 60 days.
- The PSB should develop requirements for what constitutes "plans for construction" for proposed wind generation projects. The requirements should ensure that applicants provide municipal and regional planning commissions with adequate user-friendly information to understand various elements of the proposed project, including but not limited to: identification of view shed impacts, project conceptual plans (including a schematic), general construction requirements, and plans for all new infrastructure related to the project (for example, transmission, sub station, roads, etc.).
- The PSB should implement measures to encourage developers to perform pre-planning and collaborative work with local stakeholders prior to initiating the Section 248 process. For example, applicants should be required to certify that they have submitted their plans for construction, and have made a best effort to meet with all municipal and regional planning commissions (as well as appropriate state agencies) wholly or partially within a 10-mile radius of each proposed wind turbine.

- The PSB should continue to apply its practice and history of facilitating the development of reasonable schedules and adhering to these schedules for each applicant. The PSB should also track its performance with regard to adhering to schedules for proposed wind generation projects.
- The ANR has the responsibility and resources to participate in wind cases and the PSB should encourage their participation.
- The PSB should define "affected communities" to include all towns or cities that are wholly or partially located within a minimum 10-mile radius of any proposed turbine.
- The PSB should give due consideration to the land use and energy elements of "affected" municipal and regional plans as standard practice.
- The PSB should ensure that unique impacts and needs associated with wind generation projects are considered under existing Section 248 criteria. These include but are not limited to: cumulative impacts of wind development (e.g., many wind farms within a view shed/area); safety issues (for example, ice throw); Federal Aviation Administration (FAA) lighting; flicker; noise and low frequency noise; wildlife issues identified by ANR; and decommissioning funds.
- The PSB should require wind developers to establish sufficient decommissioning funds so that sites will be restored to natural conditions if the projects are not repowered at the end of their useful life. The decommissioning funds should be kept in an escrow account associated with the property that is separate from the developer's general accounts. Self-insurance is not adequate.
- The PSB should establish a mechanism for monitoring escrow funds and determining when a project should be decommissioned (e.g., if it is not repowered or if it stops operating for an extended period of time before its expected operating life).
- The PSB and Department of Public Service (DPS) should increase public and local official education regarding the Section 248 process. Preparation and distribution of a "Citizen's Guide to Section 248" as well as the aforementioned local public information meeting are potential tactics.
- An ombudsperson should be appointed to serve as a point of contact for concerned parties in the Section 248 review process. The role of such an office might be to inform local officials and pro se parties about Section 248 process issues, filing requirements, etc. The Commission recommends that the ombudsperson be located in the DPS. The Commission recognizes that the DPS may not be able to fulfill this role based on its existing resources and recommends that the DPS and others identify and secure resources to ensure the adequate fulfillment of this position.

1. Introduction

The introduction reviews the Commission purpose and contents of this report.

1.1 Commission Purpose

Governor Douglas created the Commission on Wind Energy Regulatory Policy (Commission) by Executive Order on July 12, 2004.¹ The Commission was tasked with providing guidance and recommendations on whether the current regulatory approval process as prescribed in 30 V.S.A. Section 248 provides a review process appropriate to commercial wind generation projects and, if not, to recommend regulatory or other appropriate changes to the regulatory process. In addressing these questions the Commission was directed to:

- Gain an understanding of the history of the regulatory process, the state of the utility industry today, Vermont's current energy portfolio, how wind projects fit into that portfolio, and what wind projects are currently under consideration.
- Solicit input from project developers, utility regulators, utility managers, interested organizations and the general public; and
- Visit wind developments.

The seven Commissioners are:

- **Richard White**, Commission Chair, Derby Line
Chairman and CEO of Community National Bank
- **John Ewing**, Burlington
Former Chairman of the Vermont Environmental Board
- **Betsy Gentile**, Guilford
Executive Director of the Brattleboro Area Chamber of Commerce
- **Sam Matthews**, South Hero
Vice President of the GBIC
- **James Matteau**, Westminster
Executive Director of the Windham Regional Planning Commission
- **RADM Richard W. Schneider**, Northfield
President of Norwich University
- **Joan Loring Wing**, Rutland
Attorney

¹ To review the Executive Order creating the Commission, visit: www.vermont.gov/governor.

1.2 Overview of Contents

This report includes the following sections:

- **Current Status of Wind Power and Related Regulations.** This section reviews the current status of wind power development and related regulations in Vermont.
- **Commission Activities.** This section summarizes Commission activities and deliberations.
- **Commission Findings and Recommendations.** This section details the Commission findings and recommendations with regard to the adequacy of Section 248 for commercial wind power.
- **Other Items to Consider.** This section reviews several considerations that are either outside of the purview of the Commission's mission, or for which there was no clear consensus, but that may be useful to the ongoing and broader discussion of public policy and wind development.

2. Status of Wind Projects and Related Regulations

2.1 Wind Project Status

Wind power technology is increasingly cost competitive with other sources of generation. There are over 6,000 MW of installed wind power capacity in the U.S. and some forecasts estimate that another 2,500 MW will be installed in 2005. Wind is one of the fastest growing sources of electricity generation in the U.S., but currently fulfills less than 1% of all U.S. electricity needs.

Some industry experts estimate that developing 6 to 10 wind sites in Vermont could produce around 10% of the state's electricity requirements. In addition, a number of Vermont utilities have already included wind power in their Integrated Resource Plans (long-term plans for needs and sources of electricity). At this time, one commercial wind project is operating in Vermont, the 6 MW Searsburg Wind Facility that was installed in 1997. There are currently several proposals in the planning stage for large-scale, commercial wind farms. A number of the proposed projects are listed below:

Developer	Location	Proposed Capacity (MW)
East Haven Wind Farm	Northeast Vermont	6
Endless Energy	Equinox Mountain	7.5
Catamount Energy/Marubeni	Glebe Mountain	Up to 50
UPC Wind Partners	Hardscrabble Mountain	30
enXco	Lowell Mountain	18
enXco / Green Mountain Power Corp.	Searsburg	up to 40
	Total	~150 MW

Several of these projects have already used Section 248, the statute regulating proposed energy projects, to install meteorological testing (MET) towers (see next section for more info on Section 248). To date, the East Haven Wind Farm is the only project that has submitted an application for construction of the turbines.

2.2 Status of Regulations²

Historically, large-scale utility projects have been regulated by a section of Vermont law known as 30 V.S.A. Section 248 (Section 248) with final approval by the Public Service Board (PSB), a quasi-judicial body. The Department of Public Service (DPS) is charged with representing the public interest in utility cases before the PSB. The following is a description of the PSB taken from its web site:

The Public Service Board is a quasi-judicial board that supervises the rates, quality of service, and overall financial management of Vermont's public utilities: cable television, electric, gas, telecommunications, water and large wastewater companies. It also reviews the environmental and economic impacts of energy purchases and facilities, the safety of hydroelectric dams, the financial aspects of nuclear plant decommissioning and radioactive waste storage, and the rates paid to independent power producers.

Currently under state law, projects that come under Section 248 are exempt from local zoning and Act 250 review. The purpose of these exemptions was to give authority to the PSB to be the sole governmental body responsible for assuring the reliable provision of electric service on a statewide basis. The rationale behind this regulatory structure was to assure that the statewide utility system would be efficiently and appropriately designed to safely and reliably meet the needs of the citizens of the state. Accordingly, local political bodies do not have direct authority over the siting of energy projects. The PSB considers the public good in determining whether or not a project would have an undue adverse effect on natural resources, aesthetics or scenic beauty, etc.

In contrast, Act 250 has a number of criteria (many of which are considered by the Section 248 process) that each proposed development must meet based on the decision of a district environmental commission. The district commissions do not consider the public good in assessing a proposed project's effects on Act 250 criteria. If a project is found to have an undue adverse effect it cannot proceed.

For purposes of this deliberation, the key differences between Section 248 and Act 250 are that: 1) the first step in the decision-making process resides with the PSB versus with district commissions; and 2) the PSB's assessment of whether or not a proposed project will have an undue adverse effect on natural resources, aesthetics or scenic beauty will be considered alongside the public good or overall societal benefits of the project.

²It is important to note that the current Act 250 process will change starting on February 1, 2005. For example, the Environmental Board (EB) and the Water Resources Board (WRB) will be eliminated and the Natural Resources Board (NRB) will be created on that date for the purposes overseeing the Act 250 process, policy formulation and other duties. All appeals from Act 250 decisions will be directed to the Environmental Court with subsequent appeals to the Vermont Supreme Court. Any findings or recommendations in this report that apply to the EB should also apply to the NRB.

2.2.1 Section 248

2.2.1.1 Process

The Section 248 process is generally as follows:

1. The project developer files construction plans with the municipal and regional planning commissions. Town and regional planning commissions may hold public hearings.
2. The project developer files a petition seeking approval of a project, usually with supporting information in the form of written testimony by witnesses and other documents.
3. The PSB decides whether to assign the case to a hearing officer or hear the case itself.
4. A pre-hearing conference is held and the schedule is determined.
5. A pre-hearing order containing the schedule is issued.
6. Parties can file for intervention by a date set in the pre-hearing order. By law the parties to a Section 248 case include the applicant, the Department of Public Service (DPS), and the Agency of Natural Resources (ANR).³
7. At least one public hearing is held in the county where a proposed project is to be located.
8. Parties file direct testimony and exhibits with opportunity for discovery.
9. Parties file rebuttal testimony and exhibits with opportunity for discovery.
10. Technical hearings are held (parties present their evidence and cross-examine witnesses).
11. Briefs and reply briefs are filed.
12. Board issues a final decision (unless the case was assigned to a hearing officer).

If the case was assigned to a hearing officer, the officer issues a proposed decision, followed by a period for comment and requesting argument before the PSB. Then the PSB issues a final decision. There is also a “minor” application process for small net-metered projects under Section 248 (j). This has been applied to wind measurements towers but does not apply to commercial wind generation projects. Appeals of PSB decisions are to the Vermont Supreme Court.

³ As to the regional and municipal planning authorities the Public Service Board’s (PSB) past practice has been to allow such bodies to participate by filing a notice of appearance without the need for a formal motion to intervene. In a recent case, where both the municipality and the municipal planning commission sought to intervene, the PSB decided to allow only the municipality. The PSB may also grant party status to other persons or groups who qualify under the PSB’s rules. Under the rules intervenors must demonstrate that they have a substantial interest that may be affected by the outcome of the proceeding, the proceeding is the exclusive means by which they can protect that interest and the interest is not adequately represented by existing parties. In most instances this standard is not difficult to meet and the PSB routinely grants interventions. A party seeking intervention would make a written filing with the PSB explaining how they meet the requirements for intervenor status.

2.2.1.2 Criteria

The following is a brief summary of the 10 criteria of Section 248. In order to issue a Certificate of Public Good, the PSB must find that the project:

1. Will not unduly interfere with the orderly development of the region with due consideration having been given to the recommendations of the municipal and regional planning commissions, municipal legislative bodies and land conservation measures contained in the plan of any affected municipality.
2. Is required to meet the need for present and future demand for service.
3. Will not adversely affect system stability and reliability.
4. Will result in an economic benefit to the state and its residents.
5. Will not have an undue adverse effect on aesthetics, historic sites, air, and water purity, the natural environment and the public health and safety, with due consideration having been given to certain criteria specified in the Act 250 statute (generally including Act 250 criteria 1 to 8 and a part of criterion 9). The PSB uses the Act 250 Quechee Test for aesthetic review. The two considerations for the Quechee test are whether the project has adverse impacts, and if so, whether the impacts undue. The PSB also takes into account a project's societal benefits in determining whether an adverse impact is undue.
6. Is consistent with the utility's approved least cost integrated plan (applies only to utility projects).
7. Is in compliance with the DPS electric energy plan.
8. Does not involve a facility affecting or located on any segment of the waters of the state designated as outstanding resource waters.
9. With respect to a waste to energy facility, is included in a solid waste management plan.
10. Can be served economically by existing or planned transmission facilities without undue adverse effect on Vermont utilities or customers.

2.2.2 Act 250⁴

2.2.2.1 Process

Act 250 (Chapter 151 of Title 10, Vermont’s Land Use and Development Law) requires that certain kinds of development and subdivision plans first obtain a land use permit prior to construction.

1. To obtain a permit, developers or landowners apply to the district environmental commission administering the law in that particular district. Each of the nine District Commissions has three members and up to four alternates, all of whom are district residents appointed by the Governor.
2. Neighbors, town officials, and others can attend the site visit, which is held prior to the public hearing for a proposed development. Approximately 20 percent of Act 250 applications are scheduled for a public hearing, while the remaining 80 percent are processed as “minor” applications with no public hearing unless requested.
3. Based on the evidence presented, the district commission reviews each application carefully, then either grants a permit, generally with conditions, or denies it. The Commission can also make specific findings of fact and conclusions of law that explain its decision in detail.
4. The District Commission must base its review and decision on Act 250’s 10 criteria (see next section). Which require that the development must conform to local and regional land-use plans.
5. By law, parties to an Act 250 hearing include the applicant, the municipality and its planning commission, the regional planning commission, and affected state agencies. The District Commission may also grant party status to adjoining property owners, and to other persons or groups who qualify under Environmental Board rules.

District Environmental Commissions make the decisions on Act 250 permit applications. The Vermont EB considers appeals of District Commission decisions; any party to the hearing on a particular application may appeal to the EB. Only statutory parties may appeal decisions of the EB to the Vermont Supreme Court. Act 250 permits do not supersede or replace the requirements of other local and state permits.

2.2.2.2 Criteria

The 10 criteria described in this section must, by law, be the basis of all District Environmental Commission and EB decisions on applications for land use permits. Here are brief descriptions of the 10 criteria:

⁴ This Section is directly derived from “Act 250: A Guide to Vermont’s Land Use Law” which is posted on the EB website. Refer to footnote 2 on page 2-4 for upcoming changes to the Act 250 process.

1. Water and Air Pollution. A development must not result in undue air or water pollution.
2. Water Supply. Applicants must show that sufficient water is available for the reasonably foreseeable needs of their development. This water must come from a private source, such as a spring or well, or from a municipal water system or other public source.
3. Impact on Existing Water Supplies. If a proposed project will use an existing water supply, it must not unreasonably burden that supply. This protects existing users of a private or public water supply from having that supply diminished.
4. Soil Erosion. Because soil erosion from development sites is a principal cause of water pollution in Vermont, a proposed project must not cause “unreasonable soil erosion or reduction in the capacity of the land to hold water.”
5. Traffic. Review under this criterion most often focuses on safety and congestion related to automobile traffic — but it can also involve traffic on waterways or railways, in airports or airways, or in any other means of transportation, current or proposed.
6. Educational Services. This criterion addresses the impact of a development or subdivision on the ability of a municipality to provide educational services. If a residential or commercial project will necessitate an expansion of the town’s educational facilities and if the tax revenues to be generated by the project will not cover the costs of this expansion, this may pose an unreasonable financial burden on the town’s ability to educate its students.
7. Municipal or Government Services. This criterion ensures that a proposed project will not place an unreasonable burden on the ability of a municipality to provide such vital services as waste disposal, fire and police protection, rescue services, water and sewage treatment, and road maintenance.
8. Scenic and Natural Beauty, Aesthetics, Natural Areas, Historic Sites. This criterion addresses a range of issues, from scenic quality to impact on historic areas. Under the first part of the criterion, the District Commission asks two essential questions: Will the project have any “adverse” aesthetic impacts on the scenic quality of the area? And, if so, Will those impacts be considered “undue” when taking into consideration the type of development proposed and its surroundings?
9. Conformance with Capability and Development Plan. This criterion covers a number of issues that relate to public and private infrastructure (including the utilities’ electrical systems), natural resource areas, and planning for orderly growth.

10. Local and Regional Plans. Any proposed project must conform with duly adopted local and regional plans. These plans are updated with public input in Vermont every five years, taking into account recent changes in population, land use, and public infrastructure.

3. Commission Activities

Commission activities included information sessions, wind generation site visits, public hearings, supplemental research, deliberations, and preparation of this final report. The Commission first convened on July 27, 2004.

3.1 Timeline

7/27 – Information Session: <i>Orientation & Section 248 and Act 250 Overview</i>	10/20 – Waymart Wind Site Visit
8/10 – Information Session: <i>Energy Supply & Wholesale Power Market</i>	10/26 – Public Hearing in St. Johnsbury
8/31 – Information Session: <i>Wind Energy Overview</i>	11/4 – Deliberation
9/13 – Information Session: <i>Interested Parties</i>	11/9 – Deliberation
9/21 – Searsburg Wind Site Visit	11/16 – Public Hearing in Montpelier
10/12 – Public Hearing in Rutland	12/1 – Deliberation
	12/15 – Report submitted to Governor

3.2 Information Sessions

Consistent with the Commission’s directive to gain an understating of the current status of regulations, the energy industry, and wind development, the Commission held five information sessions. A broad range of stakeholders were represented at these sessions, including, the Department of Public Service, Environmental Board, Public Service Board, Vermont utilities (both municipal and investor owned), groups opposing specific wind projects (including the Glebe Mountain Group, Kingdom Commons Group, and Lowell Mountain Group), wind project developers, consultants, and advocate groups (i.e., Renewable Energy Vermont and Fairwind Vermont).

3.3 Wind Farm Site Visits

The Commission visited two commercial wind farm sites. The first trip was to the 6 MW Searsburg Wind Facility in Vermont that was installed in 1996. This is the site of a potential expansion that could increase the project to 40 MW. In addition, the Commission visited the 64.5 MW Waymart Wind Farm in Pennsylvania that was installed in 2003 and represents the current turbine technology used in wind development. This project consists of 43 turbines (1.5 MW GE) located on approximately seven miles of ridgeline in rural Pennsylvania. See Attachment 1 for Wind Farm Site Visit information.

3.4 Supplemental Research

The Commission also requested supplemental research and information to further inform their deliberations. This included the following:

- Supplemental survey of stakeholders (included previously mentioned groups as well as regional and local planning commissions, economic development organizations, environmental groups, and chambers of commerce).
- Report on wind siting regulatory practices in other states.
- Report in response to specific Commissioner questions on wind technology, impacts, role in market, etc.

See Attachment 2 for the Supplemental Research Documents.

3.5 Public Meetings and Feedback

The Commission also held three public hearings (10/12, 10/26, and 11/16). The first two public hearings asked for public feedback on the adequacy of Section 248 for reviewing commercial wind generation projects. These hearings were held in Rutland and in St. Johnsbury. At the third hearing, the Commission Chair presented draft recommendations and the public was given the opportunity to respond at the hearing or through written comments. Approximately 60 Vermont residents testified at the three hearings. See Attachment 2 for the Public Meeting Summary and Attachment 3 for the Summary of Written Comments.

3.6 Deliberations and Reporting

The Commission held three formal deliberation sessions in Montpelier (11/4, 11/9, and 12/1) during which the draft and final recommendations were developed. These sessions included development of a framework for deliberations, review and discussion of information, and a systematic consideration of the issues with the goal of achieving consensus. See Attachment 4 for the Deliberations Framework.

4. Commission Findings and Recommendations

The following section details the Commission's findings and recommendations and is organized based on the framework followed during deliberations:

1. What are the assumptions behind the recommendations?
2. Is Section 248 appropriate for commercial wind power?
3. Is the Section 248 regulatory process (e.g., timeline, intervention, etc.) appropriate for commercial wind power? Could it be improved?
4. Are the evaluation criteria and methods for evaluating projects against those criteria appropriate for commercial wind power? Could they be improved?
5. Is the general administrative support (e.g., public education) appropriate for wind power? Could it be improved?

4.1 Assumptions

The Commission first explored the assumptions behind its recommendations. The Commission considered the following issues:

1. Is there clear guidance with regard to Vermont's position on wind development?
2. What is the scope of the Commission's charge?
3. What is the status and outlook for wind development in Vermont and elsewhere?
4. How should any recommended changes be implemented?

4.1.1 Findings

The Commission's findings are as follows:

1. There is not statewide consensus on the development of large wind generation projects in Vermont.
2. The Commission's charge is to examine the existing process for siting and permitting large wind farms in Vermont. The Commission has not been tasked with determining whether wind is desirable, whether or to what extent it should be included in a state energy plan, or where it should or should not be sited.

3. Wind technology is rapidly evolving and large wind generation projects are being developed across the United States and internationally. Vermont utilities already have included wind power in their Integrated Resource Plans (long-term plans for needs and sources of electricity). Given changes in wind technology and possible changes in policy, it is difficult to predict maximum wind power potential in Vermont (for example, public lands are currently closed to commercial development, but this is a policy decision that could be changed in the future).
4. The Commission anticipates that most changes could be accomplished through rulemaking, but that its recommendations should not be bound by this consideration.

4.1.2 Recommendations

Based on these findings, the Commission concludes the following:

- The recommendations apply only to proposed wind generation projects and not to other types of electricity generation and infrastructure, as that is outside the scope of the Commission's directive.
- The recommendations apply to proposed commercial wind generation projects [larger than net metered projects which are generally 150 kW or less] in Vermont that will sell and deliver power through the grid. Net-metered systems are treated separately by the PSB.
- The recommendations should be implemented through rulemaking where possible, but the Commission defers to the PSB to determine how recommendations are best implemented.

4.2 Is Section 248 Appropriate?

The Commission's primary task was to determine whether Section 248 was appropriate for large-scale wind generation projects. In doing so, the Commission examined the following issues:

1. Does the PSB, which administers Section 248, have the appropriate expertise to review applications for wind generation projects?
2. Is Section 248 comprehensive enough to address wind generation projects?
3. Is it appropriate for a single State board of three members to decide whether a wind generation project should be sited or not?
4. Does Section 248 allow for the adequate consideration of local and regional input?
5. Would Act 250 be more appropriate for reviewing wind generation projects?

6. Would a combination of Section 248 and Act 250 be more appropriate?
7. Does Section 248 adequately address the potential for overlapping jurisdiction with Act 250?

4.2.1 Findings

The Commission's findings are as follows:

1. The PSB and the Environmental Board (EB) are both experienced at examining environmental impacts. The PSB has significant expertise addressing environmental issues associated with energy infrastructure projects, including the Searsburg wind project. The PSB can also hire outside experts to provide additional technical expertise if necessary. Additionally, the PSB has the expertise and legal responsibility to consider other criteria associated with energy generation, Vermont energy consumers, and associated New England-wide power issues. The EB and local district commissions that are responsible for Act 250 may not be equipped to deal with these aspects of energy projects. In addition, in the Section 248 process, the Agency of Natural Resources (ANR) (which represents Vermont's environmental interests), the Department of Public Service (DPS) (which represents public interest), and Regional Planning Commissions are automatic parties to each proceeding. Others, such as community groups and individual citizens, may apply for intervenor status. This helps to ensure the participation of advocates for local and environmental concerns.
2. The PSB applies a rigorous, flexible, and comprehensive process that has been adapted and can be further adapted for wind cases. Section 248 also incorporates key Act 250 criteria. (30 V.S.A. Section 248 (b)(5))
3. Starting February 1, 2005, the Act 250 process will involve a three-person District Environmental Commission with appeals heard before an Environmental Court judge with subsequent appeals to the Vermont Supreme Court. Similarly, the PSB is a three-person board, and appeals go directly to the Vermont Supreme Court.
4. Overall, the PSB has demonstrated adequate consideration of local and regional input. The PSB has demonstrated that pro se parties (parties not represented by an attorney) can participate effectively, even in very technical and complicated cases (though prior experience and significant dedication and effort will help this process). However, these areas should be improved.
5. There was significant testimony that Act 250 is the appropriate vehicle for wind projects, especially for projects located on ridgelines over 2,500 feet. In addition to the reasons stated earlier, the Commission finds that Section 248 is more appropriate for reviewing proposed wind generation projects due to the requirement that the PSB consider "public good", including a project's impact on the state's energy needs. Act 250 does not include consideration of "public

good”. There also is precedent for applying Section 248 to energy projects over 2,500 feet, and continued use of Section 248 will ensure the consistent treatment of proposed wind generation projects across the state. In addition, the PSB examines statewide impacts of energy infrastructure and can examine the cumulative impacts of wind development.

6. Applying both Section 248 and Act 250 to proposed wind generation projects would result in a duplicative and inefficient process, and serve to diminish the PSB’s authority to consider statewide “public good” in its deliberations.
7. There are conflicting opinions and there is currently no definitive answer for how to deal with the potential for overlapping jurisdiction between Section 248 and Act 250 (e.g., on land that already falls under an existing Act 250 permit). For example, some wind turbines may be proposed on lands that are already subject to the jurisdiction of Act 250 with permit conditions that may be difficult to resolve without going through two regulatory processes. Section 248 should have jurisdiction in these cases but provide for consideration of the existing Act 250 permit conditions.

4.2.2 Recommendations

Based on the findings, the Commission recommends the following:

- Section 248 is the appropriate vehicle for siting commercial wind generation projects. However, the Commission recommends several modifications to Section 248 for wind projects due to their unique characteristics (tower size, visibility from considerable distances, potential placement on ridgelines, etc.) and in response to concerns expressed in the public hearing process. (These recommendations are detailed in subsequent sections.)
- To address the issue of overlapping jurisdiction, the Commission recommends the following statutory change to Section 248 (which was gleaned from suggestions by Pat Moulton Powden, Chair of the EB that were based on previous work developed by EB and PSB staff (but not Environmental Board members):

(l) When site preparation for, or construction of, a facility for wind generation proposed under this section will occur on lands subject to the continuing jurisdiction of 10 V.S.A. Chapter 151 (Act 250), the public service board shall give due consideration to any findings of fact and conclusions of law contained in any prior decision issued by a district environmental commission, the environmental board or the environmental court. If a successful review of such site preparation for, or construction of, a facility for wind generation requires the amendment, repeal or modification of any condition contained in a land use permit issued by a district environmental commission, the environmental board or the environmental court, the public service board shall give due consideration to the relevant criteria of Act 250 and applicable case

precedent and take whatever action is reasonably necessary, consistent with the general good of the state, to prevent undue adverse impacts from occurring as identified in the prior findings and conclusions of the district environmental commission, environmental board or the environmental court. Any public service board decision under this section shall supersede any prior decision of the district environmental commission, the environmental board or the environmental court but only to the extent that the proposed facility for wind generation subject to proceedings under this section has an impact on prior findings and conclusions described herein.

4.3 Is the Section 248 Process Appropriate?

The Commission determined that Section 248 is appropriate for reviewing proposed commercial wind generation, but improvements are in order. Accordingly, the Commission examined whether the existing Section 248 regulatory process and timeframe are adequate for wind power. *The regulatory process* is defined as the rules for moving a wind project through Section 248, including public notification requirements, timeframe, intervention, etc. The Commission examined the following issues associated with the regulatory process.

1. Are the public notification requirements adequate? What is the appropriate view shed area that should be notified by a developer?
2. Should there be a defined timeline for reviewing wind generation projects?
3. Are the resources and requirements for party intervention adequate?
4. Is there adequate opportunity for pro se parties to intervene?
5. Is it appropriate to have an expedited process (30 V.S.A. Section 248 (j)) for meteorological testing (MET) towers? Should applicants be required to announce plans for siting wind turbines in an initial application for MET towers?

4.3.1 Findings

The Commission's findings are as follows:

1. There was significant feedback with regard to the lack of public and public official education on Section 248. This includes lack of notification and information to towns/cities that are within the view shed of a proposed wind generation project, but are not the host town/city. Other limitations that were cited include:

- Section 248 only requires one public hearing to take place in “at least one county in which any portion of the construction of the facility is proposed to be located.” (30 V.S.A. Section 248 (a)(4)(A)).
- Based on the current advance notice requirements, municipal and regional planning commissions may not have: 1) enough time to meet and hold a public hearing; or 2) adequate information to properly assess the need to comment or intervene in proposed projects. For example, one regional planning official noted that they received a brief letter that was intended to serve as the “plans for construction” for a proposed project. The current requirements include 45 days advance notice that includes undefined “plans for construction.” (30 V.S.A. Section 248 (f)).

The geographical notification requirements should be expanded because wind generation projects can have large view sheds that include a number of communities. Many aesthetics experts have used 10-mile view sheds for wind project visualization studies as view impact diminishes beyond this distance. In some cases there could be an argument made that the view impact extends beyond 10 miles.

Due to the lead time and pre-development work involved in wind project development, increasing advance notice requirements and specifying information requirements would not be overly burdensome for developers. In addition, several developers noted that they already perform stakeholder outreach prior to providing advance notice. Increased notification requirements would also help to inform a broad range of stakeholders about the proposed project. A significant increase in the advance notification period may not be merited for all projects, but the PSB has the authority to extend the request for intervention deadline and initial testimony deadline as appropriate for each proceeding.

Based on testimony from developers and local officials, advance planning and collaboration with the "affected communities" and stakeholders can promote a more efficient permitting process. It is also an opportunity for local citizens and other stakeholders to better understand and provide input into the proposed project prior to the Section 248 process.

2. The PSB currently facilitates the development of a schedule prior to each proceeding and has a history of adhering to the schedule. The process provides the flexibility to develop a schedule that allows for adequate time to address the issues associated with each unique case. This practice is appropriate for wind generation projects.
3. Any party can apply for intervention status in the Section 248 process. As mentioned before, the PSB does provide some assistance to pro se parties with regard to how to participate. The PSB also has a history of being flexible in considering and approving intervenor status applications.

4. Stakeholders expressed concern that the ANR and other interveners may not have adequate resources to participate effectively. Additional or specific funding for ANR and other interveners was not deemed necessary because ANR already has the authority and responsibility to participate, as well as the ability to fund its intervention through the DPS. In addition, the PSB has the authority to hire experts and lawyers to address any issue it believes is not being adequately addressed by the parties. (30 V.S.A. Section 248 (a)(4)(E) and Sections 20 & 21).
5. Regardless of whether a MET tower was issued a certificate of public good, any subsequent plans for development must still go through the Section 248 process. The same is true for any plans for expansion, which must also go through the Section 248 process regardless of whether or not there is an existing project. Accordingly, there is no reason to change the review process for MET towers.

4.3.2 Recommendations

Based on the findings, the Commission recommends the following:

- The PSB should host a minimum of two public meetings in the project site region, one of which will be an information session before proceedings begin to inform concerned parties about the Section 248 process, how it relates to the proposed wind project, as well as general information on the proposed wind project. The second meeting should convene later in the process, perhaps after the technical hearings, to receive additional public input after more is known about the project and before a decision is made.
- The PSB should increase applicant's public notification requirements for proposed wind generation by requiring: 1) advertising advance notice in all towns that are wholly or partially within a radius of a minimum of 10 miles of each proposed turbine; 2) initial and ongoing mailings (e.g., of key events) to all municipal and regional planning commissions, and the town clerk in each town wholly or partially within a 10 mile radius of each proposed turbine; and 3) ongoing mailings to all stakeholders that sign-up to be on a mailing list (the list should be advertised and maintained by the applicant).
- The PSB should increase the advance notice period of filing "plans for construction" to municipal and regional planning commissions from 45 days to a minimum of 60 days.
- The PSB should develop requirements for what constitutes "plans for construction" for proposed wind generation projects. The requirements should ensure that applicants provide municipal and regional planning commissions with adequate user-friendly information to understand various elements of the proposed project, including but not limited to: identification of view shed impacts, project conceptual plans (including a schematic), general construction requirements, and

plans for all new infrastructure related to the project (for example, transmission, sub station, roads, etc.).

- The PSB should implement measures to encourage developers to perform pre-planning and collaborative work with local stakeholders prior to initiating the Section 248 process. For example, applicants should be required to certify that they have submitted their plans for construction, and have made a best effort to meet with all municipal and regional planning commissions (as well as appropriate state agencies) wholly or partially within a 10-mile radius of each proposed wind turbine.
- The PSB should continue to apply its practice and history of facilitating the development of reasonable schedules and adhering to these schedules for each applicant. The PSB should also track its performance with regard to adhering to schedules for proposed wind generation projects.
- The ANR has the responsibility and resources to participate in wind cases and the PSB should encourage their participation.

4.4 Are the Evaluation Criteria and Methods Appropriate?

The Commission also examined whether the existing Section 248 criteria and methods for evaluating proposed projects against those criteria are adequate for wind power. *Criteria* are defined as the standards against which a project is evaluated. Section 248 criteria include planning impacts, need and economics, environment, Quechee, etc. The *evaluation method* is defined as the method for evaluating a wind project against each of the criteria (for example, requiring visual modeling as part of Quechee). The Commission examined the following issues with regard to criteria and methods.

1. Do Section 248 criteria, and methods for evaluating against the criteria, adequately address the unique characteristics of commercial wind generation projects?
2. Do the methods for evaluating a project against the criteria adequately consider local and regional concerns with wind generation projects?

4.4.1 Findings

The Commission's findings are as follows:

1. In general, the Section 248 criteria are comprehensive and the process is flexible enough to accommodate unique impacts and evaluation methods associated with proposed wind generation projects or related evaluation measures. There is public concern that certain impacts associated with wind development may not be adequately considered by Section 248, including but not limited to requiring the establishment and monitoring of decommissioning funds.

Aesthetics are a critical component of the review of proposed wind generation projects, and the Quechee standard developed by the Environmental Board is a valuable tool in considering these impacts.

2. Currently, Section 248 requires due consideration of the recommendations of the municipal and regional planning commissions. However, if there is no recommendation, there is no requirement that the PSB give any consideration to the plans themselves. (30 V.S.A. Section 248 (b)(1))

4.4.2 Recommendations

The Commission recommends the following to better adapt Section 248 criteria and methods for proposed wind generation projects:

- The PSB should define "affected communities" to include all towns or cities that are wholly or partially located within a minimum 10-mile radius of any proposed turbine.
- The PSB should give due consideration to the land use and energy elements of "affected" municipal and regional plans as standard practice.
- The PSB should ensure that unique impacts and needs associated with wind generation projects are considered under existing Section 248 criteria. These include but are not limited to: cumulative impacts of wind development (e.g., many wind farms within a view shed/area); safety issues (for example, ice throw); Federal Aviation Administration (FAA) lighting; flicker⁵; noise and low frequency noise; wildlife issues identified by ANR; and decommissioning funds.
- The PSB should require wind developers to establish sufficient decommissioning funds so that sites will be restored to natural conditions if the projects are not repowered at the end of their useful life. The decommissioning funds should be kept in an escrow account associated with the property that is separate from the developer's general accounts. Self-insurance is not adequate.
- The PSB should establish a mechanism for monitoring escrow funds and determining when a project should be decommissioned (e.g., if it is not repowered or if it stops operating for an extended period of time before its expected operating life).

4.5 Is the Administrative Support Appropriate?

The Commission also considered whether the general administration of Section 248 is adequate for wind power. General administrative support refers to the factors surrounding the implementation of 248 that

⁵ Flicker is caused by the sun rising or setting behind the rotating blades of a turbine. The shadow created by the rotating blades can cause alternating light and dark shadows to be cast on nearby premises.

may not necessarily require rule changes, such as providing public education on Section 248. The Commission examined the following issues with regard to criteria and methods.

1. Do public officials and the public, in general, understand the Section 248 process?
2. Are there adequate resources for them to learn about the Section 248 process?

4.5.1 Findings

Citizens and municipal and regional officials indicated that they have inadequate access to information and assistance about the Section 248 process or specific Section 248 proceedings. The PSB and DPS should take a greater role in addressing this issue based on their missions.

4.5.2 Recommendations

Based on the findings, the Commission recommends the following:

- The PSB and DPS should increase public and local official education regarding the Section 248 process. Preparation and distribution of a “Citizen's Guide to Section 248” as well as the aforementioned local public information meeting are potential tactics.
- An ombudsperson should be appointed to serve as a point of contact for concerned parties in the Section 248 review process. The role of such an office might be to inform local officials and pro se parties about Section 248 process issues, filing requirements, etc. The Commission recommends that the ombudsperson be located in the DPS. The Commission recognizes that the DPS may not be able to fulfill this role based on its existing resources and recommends that the DPS and others identify and secure resources to ensure the adequate fulfillment of this position.

5. Other Items to Consider

The Commission identified several concepts that were either outside of the purview of the Commission's mission, or for which there was no clear consensus, but could be useful to consider as the State continues to deliberate the future of wind related public policy in Vermont. These include the following:

- **Development of a Statewide Wind Site Assessment.** The Commission discussed the merits of completing a statewide wind assessment that would build upon existing studies of Vermont's wind resources. The assessment should identify those sites in Vermont that are most appropriate for large commercial wind power development through a systematic analysis of potential sites with regard to certain Section 248 criteria, such as aesthetics. The assessment could be developed and administered by the DPS in conjunction with ANR. This study should consider the following factors: the adequacy of the wind, proximity to existing transmission lines, whether there is existing development at a site, an analysis of the view shed, and environmental considerations that can be evaluated in a relatively straightforward manner. This information should be distributed to municipal and regional planning commissions so they can educate themselves about wind generation if there are areas identified as appropriate sites for wind in their jurisdiction.
- **Energy Plan with Specific Detail on Wind Power.** A number of states specifically include goals for wind power and measures for meeting those goals in their state energy plans. While the Vermont Energy Plan supports renewable energy, it does not currently prescribe specific technologies. Deliberation on whether or not to include wind would help better define public policy as well as help guide the state's utilities in the development of their Integrated Resource Plans.
- **Provide Funding for Affected Municipalities.** The Commission discussed the potential financial burden on municipalities when reviewing proposed wind projects and whether they may require funding reimbursement for review and to conduct their own investigation/studies as deemed necessary. Because the Commission has proposed expanding the definition of "affected communities" to include all towns/cities within a 10-mile radius of proposed wind turbines, the Commission could not reconcile how such funds would be distributed to many participating municipalities. It was also discussed that if all "affected" towns/cities within a 10-mile radius were allowed to apply for funding reimbursement it many become overly burdensome to the developer of a project. The Commission recommends that this issue be further researched and possible solutions be explored.